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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/684,738	10/14/2003	Masayasu Ito	02008/131001	4283

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OSHA LIANG L.L.P.
1221 MCKINNEY STREET
SUITE 2800
HOUSTON, TX 77010

EXAMINER

VU, DAVID HUNG

ART UNIT PAPER NUMBER

2828

DATE MAILED: 06/02/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/684,738	ITO ET AL.	
	Examiner	Art Unit	
	David Vu	2828	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-5 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1,3 and 5 is/are rejected.
- 7) ☒ Claim(s) 2,4 is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. ____. |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date <u>10/14/03,12/29/04</u> . | 6) <input type="checkbox"/> Other: ____. |

DETAILED ACTION

Specification

1. Applicant's cooperation is requested in correcting any errors of which applicant may become aware in the specification.

Claim Objections

2. Claim 3 is objected to because of the following informalities: "...by switching which one of...is selected." is awkward. Appropriate correction is required.

Claim Rejections - 35 USC § 112

3. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

4. Claim 5 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

The recitation "...wherein said switching device is connected to...and switches whether or not said power supply is supplied to said primary coil" renders the claim confusing since the switching device can not switch when current does not flow through the primary coil and thus the switching device.

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claims 1 and 3 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hamp et al (hereinafter Hamp) of record, U.S. Pub. No. 2001/0033503 in view of Lefebvre, U.S. Pat No 6,641,294.

Hamp essentially discloses a lighting circuit including selection unit SW1-SW-8, LEDs CR2-CR9 in series, wherein selection unit is operable to select a number of LEDs based on an instruction from an outside, e.g., from an user; switching regulator 2-3 for applying a voltage from battery 6 to the LEDs; and output controlling 5 for controlling output voltage from the switching regulator based on the supply current, see, for example figure 1, paragraph [0007]-[0009]. Hamp does not explicitly disclose the lighting circuit as being used in vehicular lamp. However, LED lighting circuit in vehicular lamp is very well known as evidenced in the Lefebvre reference which shows LED lighting circuit (figure 3, abstract, column 3, lines 10-66) in vehicular lamp. An obvious modification would have employed the LED lighting circuit in vehicular lamp; thus, a more efficient lighting system would have been realized.

Regarding claim 3, figure 3 of the Lefebvre reference shows three parallel blocks with LEDs in series and the selection unit 40 selects the LEDs connected in series by switching the selected block. The Hamp and Lefebvre combination does not explicitly disclose the LEDs in each block are different. However, assigning different LEDs in each block would have been considered obvious to one of ordinary skill in the lighting art. Thus, it would have been obvious to one having ordinary skill in the art at

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the time of applicant's claimed invention was made to have employed different LEDs in each block so as to allow more or less light energy emanating from each LED block.

7. Claim 5 is rejected under 35 U.S.C. 103(a) as being unpatentable over Jacobs et al (hereinafter Jacobs) of record, U.S. Pat. No. 6,304,464 in view of Lefebvre, U.S. Pat No 6,641,294.

Jacobs discloses the claimed invention including switching regulator including transformer L2 and switching device T1 having primary coil L21 for receiving a power supply current output and secondary coil L22 for supplying current to LEDs by applying an output voltage higher than a supply voltage to the LEDs based on the supplied current; switching device T1 is connected to primary coil L21 and being switched on and off; output controlling unit SC to control a duration ratio of a period in which the switching device is on or off based on the supply current to control output voltage of secondary coil L22, see, for example figures 2 and 4, column 2, lines 30-67, column 4, lines 4-6, claim 1. Jacobs does not explicitly disclose the power supply current output by an external DC power supply. However, DC power supply is very well known as evidenced in the Lefebvre reference which discloses LED lighting circuit as receiving power from a DC source (figure 3). Thus, one of ordinary skill in the lighting art would have known how to have employed a DC power supply in the LED lighting circuit so as to provide DC power to the LEDs.

The recitation "for lighting a vehicular lamp" has not been given patentable weight because the recitation occurs in the preamble. A preamble is generally not accorded any patentable weight where it merely recites the purpose of a process or the intended

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use of a structure, and where the body of the claim does not depend on the preamble for completeness but, instead, the process steps or structural limitations are able to stand alone. See *In re Hirao*, 535 F.2d 67, 190 USPQ 15 (CCPA 1976) and *Kropa v. Robie*, 187 F.2d 150, 152, 88 USPQ 478, 481 (CCPA 1951).

Note that the Lefebvre reference clearly discloses such lighting circuit in a vehicular lamp.

Allowable Subject Matter

8. Claims 2 and 4 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

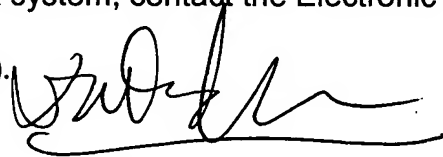
Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to David Vu whose telephone number is (571) 272-1831. The examiner can normally be reached on M-F 8am-430pm.

The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

A handwritten signature in black ink, appearing to read 'David Vu', with a horizontal line underneath.

David Vu
Primary Examiner
Art Unit 2828

dv